ARTICLE

Do we need a 6i Framework? Discussing the implications of Society 5.0 for the multi-level understanding of organisational learning

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Our regular contributors Prof Christian Nielsen and Prof Jacob Brix from Denmark continue to explore the concept of Society 5.0 – a sustainable, inclusive and human-centered 'society of the future'. They discuss how a city, region or group of organisations can initiate a collaboration built on Society 5.0 principles, and propose a new level in the theory of organisational learning – a 6i framework, where 'i' stands for 'inspiration'.

1. Introduction

Society 5.0 is a policy movement envisioned as a proactive response to the grand challenges we are currently facing. It is "(…) a human-centred society that balances economic advancement with the resolution of social problems by a system that highly integrates cyberspace and physical space".[1] At its core, Society 5.0 aims to balance out economic development and solve societal issues by emphasising a change of mindset from 'only' having a financial line of thought towards an inclusive, socially responsible and ecosystem line of thought.[2] In Society 5.0, with its focus on exploring and exploiting the integration of the physical space and cyberspace, "(…) advanced IT technologies, Internet of Things, robots, artificial intelligence and augmented reality are actively used in everyday life, industry, healthcare and other spheres of activity, not primarily for economic advantage but for the benefit and convenience of each citizen".[3]

We are witnessing a paradigm shift in societal development. Some organisations have already

1. Japan Cabinet Office, 2016
2. E.g., Huang et al., 2022
3. Breque et al., 2021, p.9

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started this transition by adopting their strategies and ways of working, for example, by incorporating the ten principles of the UN Global Compact[4] and the 17 UN Sustainable Development Goals (SDGs).[5] Also, policy tendencies point in this direction. The European Commission published a policy brief in 2021 on Industry 5.0 that is similar to Society 5.0.[6] New reporting legislation will affect all European small and medium-sized enterprises (SMEs) from 2023, requiring them to report their Corporate Social Responsibility impacts based on their business models and strategies.[7] A reflection is, therefore, whether established organisations can opt out of including Society 5.0 mechanisms in their strategies in the long run if they want to remain relevant.[8]

Embarking explicitly towards Society 5.0 is not done by an organisation alone. The premise for realising this paradigm-shifting vision is *collaboration* across organisational and sectoral boundaries[9] and those different organisations renewing their strategies[10]. The Society 5.0 agenda challenges our organisational and management theories as these are typically created, tested and elaborated within one sector.[11] Therefore, the definitions and the outcome differs, if we talk about strategic innovation from the standpoint of either a public organisation or private company. From a private sector perspective, examples of strategic innovation could be the creation of new markets, commercialisation of new technology or business model innovation,[12] and from a public and third sector perspective, examples of strategic innovation could be new partnerships with organisations from other sectors, and the introduction of co-production of public services that traditionally have been defined top-down.[13]

In this paper, we use the theory of organisational learning and inter-organisational learning because this stream of literature argues that strategic management (and strategic innovation) is about striking a balance between *exploration* and *exploitation*,[14] which represents a logic already used by organisations.[15] Larger cities and municipal regions can respond to the 'bottom-up' processes of the new 6i paradigm. Our logic is that a joint innovation strategy that takes the point of departure in the Society 5.0 framework would have to be defined among organisational stakeholders in a local region that includes a shared vision that can unite public, private and third-sector organisations.

In this conceptual research paper, we discuss the following question to help realise the promises made by the Society 5.0 paradigm: *How can a city, a region, or a group of organisations initiate and develop a collaboration that is built on the principles of Society 5.0, and what would be vital for them to consider regarding such collaboration?* The purpose is to understand better how the transition from the current society level towards Society 5.0 can be supported by providing reflections on and advice to Society 5.0 as an emerging field of research. Our paper aims to initiate a dialogue in the research community on how we, as scholars, can help and advise practitioners in this critical transition.

4. https://unglobalcompact.org/what-is-gc/mission/principles
5. https://sdgs.un.org/goals
6. Breque et al., 2021
7. European Commission, 2023
8. Huber, 2004; Nielsen and Brix, 2023
9. Carayannis and Morawska-Jancelewicz, 2022; Klitgaard, 2023
10. Nielsen and Brix, 2023
11. E.g., Colquitt and Zapata-Phelan, 2007
12. E.g., O'Connor et al., 2018; Taran et al., 2021
13. Bovaird et al., 2019; Brix et al., 2021; McMullin, 2022
14. March, 1991; Huber, 2004; Brix, 2019
15. Choi and Chandler, 2015; Anand et al., 2019; Anand and Brix, 2022

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In the following, we start by explaining what Society 5.0 is. Then, we introduce and unfold the theoretical background of inter-organisational learning. Finally, we discuss and conclude the study.

2. Explaining Society 5.0

Section 2 explains the evolution from the hunter-gatherer society towards Society 5.0 and what is understood by this.

2.1 The development from Society 1.0 onwards

What characterises the development from one societal stage to the next is that the new stage seeks to solve the problems created by the 'old model'.[16] Thousands of years ago, the development went from the hunter-gatherer society (Society 1.0) to the agricultural society (Society 2.0) because there was no longer enough food for increasing population numbers and because new knowledge and technology made it possible to move forward. In the later stages of Society 2.0, investments started to build critical infrastructure that could be used to move goods over longer distances. The transition to the industrial society (Society 3.0) occurred as knowledge accumulated and new, more advanced technology emerged. At the beginning of Society 3.0, workers were regarded as machines without rights, and when the development of automation accelerated, we started talking about working hours, labour rights, etc. Around five decades ago, we saw the transition to an information society (Society 4.0).[17] The Society 4.0 is characterised by mass globalisation, consumption of scarce resources, profit maximisation, efficiency, standardisations of production, etc., which has created grand challenges.[18]

2.2 Society 5.0

The Society 5.0 is defined as "(…) a human-centred society that balances economic advancement with the resolution of social problems by a system that highly integrates cyberspace and physical space".[19] Society 5.0 assumes that development must be human-centred.[20] New digital technology and platforms such as the metaverse – a seamless connection between people's physical and digital lives – will play a role in future societal development. The shift in the new policies is that social innovation is equated with technological innovation.[21] The latter has so far had the status of golden standard in national and international policies. However, human-centred development does not mean that technology must necessarily be attributed a lower value: "Industry is an integral part of society. The revolution of the industry will push the development of society. Also, the transformation of society will promote the next industrial revolution".[22]

In Society 5.0, a prioritised integration of cyberspace and physical space brings value for the public in this integration.[23] In Society 5.0, the logic is that critical actors at international, national, regional and local levels must start by finding common visions that matter to them and then examine how technology, economy and experts can be used and mobilised to create these changes.[24]

16. Huang et al., 2022
17. Ibid.
18. Defined by the UN SDGs such as 'Affordable and clean energy' (SDG7) and 'Sustainable cities and communities' (SDG 11)
19. Japan Cabinet Office, 2016
20. Huang et al., 2022
21. Gershenfeld et al., 2017
22. Huang et al., 2022, p. 427
23. Nielsen and Brix, 2023
24. Japan Cabinet Office, 2016

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2.3 Society 5.0 Agenda

The logic is that society has not utilised current technologies to their fullest potential because there is a gap between technological development and social development. Hence, we see the consequence of having used more resources in our production than the planet has been able to regenerate.[25] In short, the Society 5.0 agenda is to create a resilient, sustainable, and human-centred development focusing on all people's well-being, whether they are citizens, users, customers, employees or managers. The premise for success is that a framework must be created for a system of systems across sectoral boundaries, cyberspace, and the physical world to be resolved, and where loosely coupled partnerships collaborate to resolve societal problems. Boemenburg and Gassmann[26] provide a less abstract and exciting connection to the societal development trends denoted by the Society 5.0 movement. The underlying mechanisms in a Society 5.0 perspective rest on a Penta-Helix mindset where human and artificial intelligence enrich one another, and stakeholders collaborate across traditional boundaries. According to Huang et al.,[27] there are six characteristics of a Society 5.0. These are presented in Table 1 below.

The mindset here is akin to collaborative thinking regarding ecosystems, and the requirements for collaborative learning and value creation are eminent.[28] Therefore, doing business and competing based on collaborative ecosystems is expected to be increasingly applied. The barriers associated with these ways of collaboration and working are highlighted by Nagasato et al.[29] as 'walls' that need to be broken down, and these are the five walls of 1) social acceptance, 2) human resources, 3) technologies, 4) the legal system, and 5) ministries and agencies.

Society 5.0 can serve as a lever for strategic innovation in a local context where various organisational actors from different sectors

TABLE 1: Society 5.0 characteristics

• Innovation often occurs across sectors and disciplines and can be transferred from one area to another.
• Initiatives are open and collaborative and constantly include a wide range of actors.
• Ideas and implementation are often bottom-up processes, although usually with support from the public system or companies and characterised by co-production.
• Innovation often creates formal communities of interest, such as associations and organisations.
• Innovation focuses on discovering, using, and coordinating the mobilisation of both physical and human resources.
• Innovation often results in new partnerships (among public actors, companies, associations, individual citizens, etc.) or new distribution roles in existing partnerships.

25. Gershenfeld et al., 2017
26. Boemenburg and Gassmann, 2022
27. Huang et al., 2022
28. Es-Sajjade, 2019
29. Nagasato et al., 2018

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can collaborate to start realising the promises made by the Society 5.0 vision. This, however, is not problem-free, since many dilemmas and paradoxes will arise.[30] At the organisational level, the transition, e.g., to more or new digitalisation, requires executives "to look carefully at all aspects of their operations, and in many cases to embark on an integrative programme of digital transformation (…) which involves re-examining the cognitive dimension of the business model (how managers seek to create and capture value), the routines, and the operating model (how internal activities are structured and managed)".[31] In our article, we are particularly interested in the style of collaboration required to realise the Society 5.0 vision and, hence, the need for both organisational – and inter-organisational learning to take place. In the definition by the Japanese Cabinet Office,[32] the premise is that the balance is created by "(…) **a system** that highly integrates cyberspace and physical space". In the following, we will elaborate on how such a 'system' can be understood, built and elaborated from a theoretical perspective.

3. Theoretical background

Theories of organisational and inter-organisational learning[33] are now applied to frame a discussion for how a collaborative context can be initiated and elaborated with the point of departure in the Society 5.0 vision. The proposed logic is that understanding the value creation co-produced across organisational and sectoral boundaries is imperative and that Society 5.0 introduces new dimensions of connectedness, a term applied by Gassmann and Ferrandina.[34] Society 5.0 introduces new types of connections, for example, using advanced technologies to enhance value for citizens by creating efficiencies and new business models through digitalisation and data. In addition, Society 5.0 introduces the merging of the natural world with the metaverse. Applying a systems perspective, looking at the collaborative processes and the value added to all stakeholders, enables us to provide tentative advice on the preliminary "dos and don'ts" in the remainder of the paper.

3.1 Inter-Organisational Learning: Definition and Key Components

Inter-organisational learning is defined by Larsson et al.[35] as "achieved by transferring existing knowledge from one organisation [to another organisation], as well as by creating completely new knowledge through interacting among organisations". We argue that the theory of inter-organisational learning (and organisational learning) represents a relevant framing for this paper, since the exploration-exploitation division applies to understanding strategic renewal in all organisations. In addition, this literature is well-developed in explaining 1) the nestedness of learning,[36] 2) the 'together-we-stand-stronger' argument,[37] and 3) the processes of creating new knowledge and putting it into play.[38]

The *first* explains how learning takes place at different levels, ranging from the individual to the group/team, to the organisational and inter-organisational, and back again.[39] The *second* logic

30. Schmitt et al., 2018
31. Volberda et al., 2021, p. 3
32. Japanese Cabinet Office, 2016
33. Larsson et al., 1998; Holmqvist, 2003; Brix, 2021
34. Gassmann and Ferrandina, 2021
35. Larsson et al.,1998
36. Crossan et al., 1999
37. Larsson et al., 1998
38. Argote, 2011
39. Crossan et al., 1999; 2011; Holmqvist, 2003; Jones and MacPherson, 2006; van Winkelen, 2010; Brix, 2017; 2021

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is that the theory of inter-organisational learning emphasises that organisations in collaboration can create better results together than if they were not collaborating with other actors.[40] The *third* logic is that the processes of working with knowledge and its links to learning are well established and help explain how knowledge creation, retention and transfer can be performed.[41]

A premise for inter-organisational learning is that collaborating organisations have to focus on the dual processing of learning (the two-level game) that takes place at different paces because new collaborators have to learn to collaborate before they can achieve performance-improving outcomes of their collaboration.[42] This implies that organisations that collaborate need to understand the critical components. First, collaborating organisations need to agree on the purpose and goal of the collaboration. Collaborators must also be aware of 'if and how they are interdependent' in the collaboration, understanding how, where and when their *complementary resources and capabilities* must be put into play to create value.[43] To enable this, collaborators must develop well-functioning knowledge-sharing routines and create *effective governance structures* so that the minimum amount of resources are used for coordination and communication. Unnecessary bottlenecks in information processing are created.[44] In the following, we briefly elaborate on the nestedness of learning and the links between knowledge and learning.

3.2 The nestedness of learning

The ground-breaking work of Crossan et al.[45] sparked a stream of literature in the organisational learning community on the multi-level approach to learning, compared to the previous distinction between individual and organisational learning.[46] The publication by Crossan et al.[47] introduced the '4i framework' also took traction in the literature on inter-organisational levels of learning, which allowed the creation of a '5i framework' and hence linked these two strands together explicitly.[48] Table 2 summarises the nestedness of learning and how learning flows from one level to another and back again.

The five sub-processes (the 5i's) mentioned in Table 1 represent organisational members' actions to learn at different levels, both internally and externally. The logic is that individuals can learn without the group learning and that a group can learn without the organisation learning, etc. Table 2 also highlights the agency that is important in organisational learning, that members engage in the sub-processes at different levels to secure the creation and use of new knowledge to make the organisation continuously relevant by striking a balance between exploration and exploitation.[49] For inter-organisational learning curves, the collaborating organisations must be *receptive* and *transparent*.[50] 'Transparent' implies that organisational actors are willing to open up and share knowledge with collaborators, and 'receptive' refers to the ability and motivation of

40. Larsson et al., 1998; Jones and Macpherson, 2006; Anand et al., 2021
41. Argote, 2011; Brix et al., 2021
42. E.g., Holmqvist, 2003
43. Brix et al., 2021
44. Dyer et al., 2018
45. Crossan et al., 1999
46. E.g., Crossan et al., 2011; Brix, 2017; Morland et al., 2019
47. Crossan et al., 1999
48. Holmqvist, 2003; Jones and Macpherson, 2006; Brix, 2019; Brix et al., 2021
49. Huber, 2004
50. Larsson et al., 1998

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TABLE 2: The Nestedness of Learning

Level of learning	Sub-process The 5i's	Explanation
Individual learning	Intuiting (individual)	Is a preconscious recognition of a pattern and/or possibilities inherent in a personal stream of experience, e.g., when confronted with new stimuli.
	Interpreting (individual)	It is the explaining, through words and/or actions, of an insight or idea to oneself and others. A process that goes from pre-verbal to verbal.
Group/Team learning	Interpreting (team)	As above but when a language is created or being created that enables the framing of a problem or an opportunity.
	Integrating (team)	It is the process of developing a shared understanding among individuals and taking coordinated actions and elaborate opportunities together. This work can be done, e.g., as ad hoc actions or via established ways of working.
Organisational learning	Integrating (organisational)	Is the process of preparing the new knowledge (and the organisation) for implementing/realising.
	Institutionalising (organisational)	Is the process of ensuring that routinised actions occur. Tasks are defined, actions specified, and organisational mechanisms put into place to ensure that certain actions occur.
Inter-organisational learning	Intertwining (inter-organisational)	Is the process of active engagement between an organisation and its knowledge network. For intertwining to work, there is a need to have an active feedforward loop (within out) and feedback loop (outside in) to learn from experiences of others and to create new knowledge in collaboration.

Source: Authors' summary of Crossan et al.,[51] Jones and Macpherson[52] and Brix[53]

an organisation to use new knowledge that has been created (or shared) with or by partners. It is hence essential that collaborating organisations "(…) develop their collective knowledge by constructing and modifying their inter-organisational environment, working rules, and options"[54] in such a way that the collaboration they experience makes sense and creates the value that is expected to materialise.[55]

3.3 Linking Knowledge and Learning

The learning processes above represent the logic on which knowledge is created and elaborated. More specifically, the processes of *knowledge creation*, *retention* and *transfer* are well-established in organisational learning theory.[56] Knowledge creation occurs when new knowledge is created (RandD activities) absorbing it from external

51. Crossan et al., 1999
52. Jones and Macpherson, 2006
53. Brix, 2017
54. Ibid., p. 287
55. See also, e.g., Bjurström et al., 2020
56. Argote, 2013; Lyles, 2014; Brix, 2017

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sources, employing new talents, and handling situations in new ways, hence building intellectual capital that leads to value creation.[57] Knowledge retention is among some of the processes of using knowledge and building routines, so it gets institutionalised into the company's intellectual capital.[58] Knowledge transfer is when knowledge created in one organisation can be used to create value in another organisation.[59]

The same constructs can be applied in inter-organisational learning theory, although different constructs with similar meanings are also used. Es-Sajjade,[60] for example, utilises the three constructs of *knowledge articulation*, *codification* and *transfer*. Knowledge articulation is the process of making (individual) tacit knowledge into explicit knowledge so that individuals can engage in dialogue about the subject. Knowledge codification can, for example, create knowledge objects such as guidelines, checklists, etc. Knowledge transfer is sharing knowledge objects with individuals to whom the (new) knowledge would be helpful, e.g., to create new or better practices.[61]

The knowledge that has the characteristics of being codifiable and stored can respond to simple and technical problems. Knowledge such as step-by-step approaches will work no matter the context – for changing a car battery, installing new software, etc. The knowledge codification and transfer become much more complex and more difficult when the issues at hand represent complex phenomena, such as, for example, responding to grand challenges.[62] This leads to a discussion in organisational learning theory: that 'best practices' no longer represent 'the golden standard' to achieve successful learning across organisational boundaries.[63] The logic is that best practices represent 'false generalisations' because best practices "(…) depend on the predictability and stability for the environment, and it is well known that the environment of alliances lacks both criteria".[64] In inter-organisational learning, there is also a distinction between different learning processes that, in different ways, support knowledge creation and transfer. These are *passive*, *active* and *interactive learning*.[65] The passive and active approaches to learning represent the sharing and use of explicit knowledge, such as technical process specifications, journals (passive learning) and consultancy where advice is given in a set-up that could look like a 'student-teacher relationship' (active learning). When organisations collaborate to create new knowledge in more equal partnerships, they go through the process of interactive learning.

4. Discussion and conclusion

The discussion and concluding section provides a critique of the applied theory and the context of Society 5.0 and offers a novel development to the literature.

4.1 Inter-organisational Learning and Applicability to Society 5.0

This section examines the applicability of the current state of the literature on inter-organisational learning and its ability to explain how organisations can collaborate towards a Society 5.0 agenda. This is done by stating three general points of critique.

57. Dane-Nielsen and Nielsen, 2018
58. Guthrie et al., 2018; Dumay et al., 2018
59. Edvinsson, 2018
60. Es-Sajjade, 2019
61. Ibid., p.245
62. Mortensen et al., 2020
63. Kringelum and Brix, 2020
64. Es-Sajjade, 2019, p. 247
65. Lane and Lubatkin, 1998

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Critique 1: The literature is based on the premise that knowledge that has been shared or created in inter-organisational collaborations has to be institutionalised in the individual organisation before it can create value.[66] This view has a particular 'capitalistic bias' in the context of Society 5.0, where the focus is on a human-centric approach and the creation of value also for the public.[67] This implies that current theory must add a perspective to our current understanding of inter-organisational learning that explains how to value 'for the greater good' is enabled, thus pointing outside of the 'traditional view'.

Critique 2: Research on inter-organisational learning has strong growth agendas and focuses on arguments related to wealth creation, such as efficiency, better and faster RandD, etc.[68] We do not know much about how public, private and third-sector organisations initiate collaborations to define a united vision and strategy for a city, region or alike with a balanced outcome priority of 'both economic and social outcomes', because multiple agendas will be present. Meaning needs to be negotiated.[69] In practice, scholars can learn from Brainport Eindhoven, for example, which is a Dutch initiative in the metropolitan region of Eindhoven, where organisations from different sectors have worked for years to build a unified brand for the region to create a 'home for pioneers'.[70]

Critique 3: While the Society 5.0 agenda and similar concepts are gaining traction politically,[71] we have yet to see actual outcomes. The promise is that social problems can be mitigated by integrating physical space and cyberspace.[72] However, we do not know much about how this high degree of integration can be adopted in practice and how collaborating organisations can think about the seamless integration of physical and digital lives in the metaverse.

4.2 Building a new model for inter-organisational Learning in Society 5.0

Considering critique points 1 and 3, we propose a model for inter-organisational learning that can act as a first attempt to prescribe how organisations can collaborate to operationalise a Society 5.0 agenda in a local setting. The model provides an example of a system responsible for operationalising the new paradigm cf. the definition.[73]

Based on the Society 5.0 agenda, we suggest that a new level of learning is added to the literature: *extra-organisational learning*. The sub-process related to extra-organisational learning is inspiring. Inspiring is "The process of making new knowledge valuable to other organisations (and the broader public) available as open source". See Figure 1.

The extra-organisational level of learning and the associated sub-process of inspiring represent new additions to the literature on 4i and 5i multi-level models in organisational learning.[74] See also Table 3 below – an updated version relating a sixth phase, the 6i, to the multi-level models for a Society 5.0 context. The extra-organisational level of learning becomes relevant because of the Society 5.0 vision, where value is created and extended beyond

66. Holmqvist, 2003; Jones and Macpherson, 2006; Anand et al., 2019
67. Nielsen and Brix, 2023
68. Mariotti, 2012; Anand et al., 2021
69. Nielsen and Brix, 2023
70. https://brainporteindhoven.com/int/
71. Japan Cabinet Office, 2016; Breque et al., 2021
72. Japan Cabinet Office, 2016; Huang et al., 2022
73. Japanese Cabinet Office, 2016
74. Crossan et al., 1999; 2011; Holmqvist, 2003; Jones and Macpherson, 2006; Brix, 2017; 2019; Anand et al., 2021

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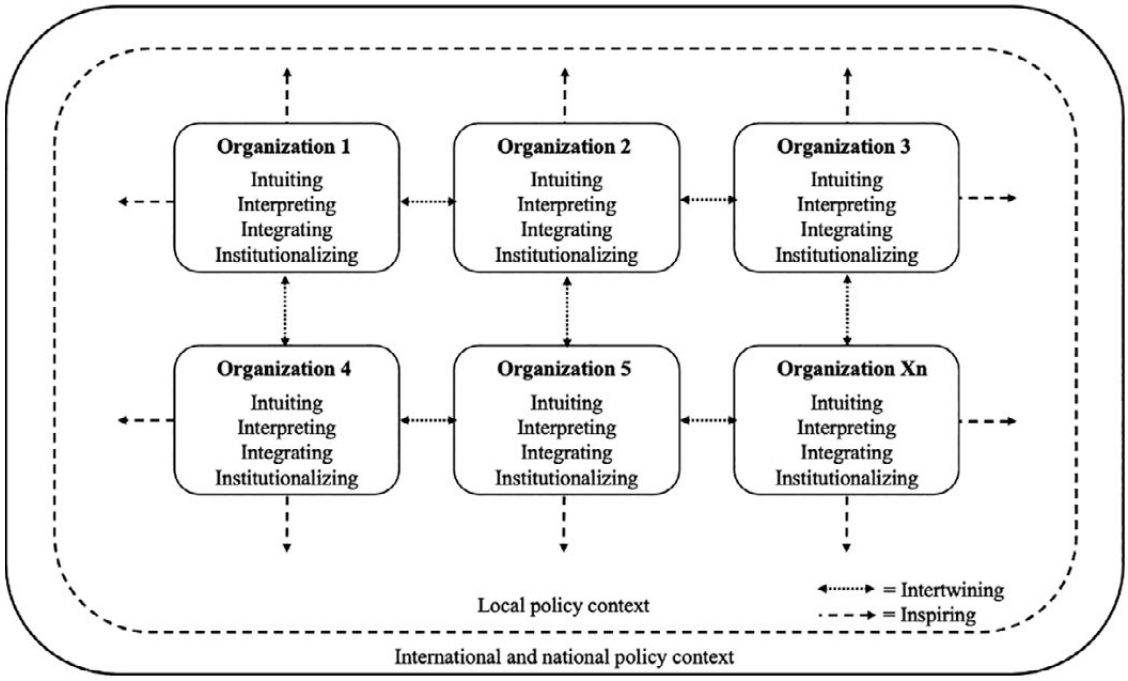
FIGURE 1



Source: Authors' development

organisational boundaries, and not only for the organisations who are part of the collaboration[75] and not only for organisations in the real world, but also for organisations and actors in the metaverse. This implies a new way of thinking about inter-organisational learning.

Traditionally, research regarding value creation and appropriation has been isolated within organisations that collaborate.[76] An excellent example of this 'closed loop' way of thinking is found in the following quote: "As long as the size of the joint pie is constant, the interaction becomes a zero-sum game in which only competitive efforts are rewarded (…) most socio-economic interaction involves the individual trade-off decisions of each actor regarding how much of his/her limited efforts are to be spent on collaborating and internally competing, respectively."[77]

75. Japan Cabinet Office, 2016; Breque et al., 2021; Huang et al., 2022; Nielsen and Brix, 2023
76. E.g., Anand et al., 2021
77. Larsson et al., 1998, p. 288

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TABLE 3: The Nestedness of Learning by adding 6i for Society 5.0

Level of learning	Sub-process	Explanation
Individual learning	Intuiting (individual)	Is a preconscious recognition of a pattern and/or possibilities inherent in a personal stream of experience e.g., when confronted with new stimuli
	Interpreting (individual)	Is the explaining, through words and/or actions, of an insight or idea to oneself and to others. A process that goes from pre-verbal to verbal
Group/Team learning	Interpreting (team)	As above but when a language is created or being created that enables the framing of a problem or an opportunity
	Integrating (team)	Is the process of developing shared understanding among individuals and taking coordinated actions and to elaborate opportunities together. This work can be done, e.g., as ad hoc actions or via established ways of working
Organisational learning	Integrating (organisational)	Is the process of preparing the new knowledge (and the organisation) for implementing/realising
	Institutionalising (organisational)	Is the process of ensuring that routinised actions occur. Tasks are defined, actions specified, and organisational mechanisms put into place to ensure that certain actions occur.
Inter-organisational learning	Intertwining (inter-organisational)	Is the process of active engagement between an organisation and its knowledge network. For intertwining to work there is a need to have an active feedforward loop (within out) and feedback loop (outside in) to learn from experiences of others and to create new knowledge in collaboration.
Extra-organisational learning	Inspiring (extra-organisational)	Is the process of making new knowledge which is considered to have value to other organisations and the public domain within the real world and the Metaverse available as open source.

Source: Figure 1 updated with the extra-organisational learning level

With the extra-organisational level of learning and the sub-process of inspiring, we argue for the relevancy of 'opening the learning loop' when possible for the broader benefit of people and society.[78] The idea is that actors in local contexts can start bottom-up on building relationships – e.g., cf. the suggestions made by Nielsen and Brix[79] – and engage in the process of defining a shared vision for how they would like to help solve one or more grand challenges from the point of departure in their local setting.

We hope this paper will inspire scholars and practitioners to engage in the Society 5.0 agenda.

78. Japan Cabinet Office, 2016; Breque et al., 2021; Huang et al., 2022; Nielsen and Brix, 2023
79. Nielsen and Brix, 2023

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